

Physical Features

Big Idea

The physical environment affects how people live. As you read, complete the chart below by listing five bodies of water or landforms of the region. Then explain why each is important.

Physical Feature	Importance
1.	
2.	
3.	
4.	
5.	



Read to Learn

The Region's Landforms (pages 443–444)

Locating

Identify the mountain ranges located in each area below.

North Africa

Southwest Asia

Central Asia

North Africa, Southwest Asia, and Central Asia extend from the Atlantic coast of northern Africa to the mountains in the middle of Asia.

Seas and Waterways

The major bodies of water that surround the region include the Atlantic Ocean, the Mediterranean Sea, the Black Sea, the Red Sea, the Persian Gulf, and the Arabian Sea. These seas have enabled the people to trade more easily with the rest of Africa, Asia, and Europe. Smaller waterways link these seas. They include the Strait of Gibraltar, the Dardanelles Strait, the Sea of Marmara, the Bosphorus Strait, the human-made Suez Canal, and the Strait of Hormuz.

Mountains, Plateaus, and Lowlands

The landscape throughout the region is rugged. The Atlas and Ahaggar Mountains cover much of western North Africa. Low plains and low-lying plateaus make up the central and eastern parts of North Africa. The Zagros Mountains and Hindu Kush rise in Southwest Asia. A narrow gap through the Hindu Kush, called the Khyber Pass, is part of a trade route linking

The Region's Landforms *(continued)*

Identifying

Underline two civilizations that arose in this region.

Circle the rivers that allowed these civilizations to thrive.

Southwest Asia to other parts of Asia. Central Asia holds the lofty Pamirs and Tian Shan ranges. Central Asia also has lowlands along the Caspian Sea as well as several desert areas.

Rivers

People have long settled along river valleys to benefit from the rich soil. The civilization of Egypt arose along the Nile River. Flooding of the Nile River provided water and **silt**, or small particles of rich soil. This made the land good for growing crops. The Tigris and Euphrates Rivers in Southwest Asia formed an **alluvial plain**, or an area of fertile soil left by river floods. The civilization of Mesopotamia arose on this alluvial plain.

Natural Resources *(pages 444–446)*

Listing

Write down seven natural resources found in North Africa, Southwest Asia, and Central Asia.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

The region of North Africa, Southwest Asia, and Central Asia is rich in natural resources. Two of its resources, petroleum and natural gas, are important to countries around the world.

The largest reserves of petroleum (oil) and natural gas are in the Persian Gulf. The land in the area is made up of **sedimentary rock**, a type of rock created when layers of material are hardened by extreme weight. For millions of years, oil collected between the layers of rock.

Countries with oil have become wealthy from selling it. They have used this wealth to develop industry and to provide benefits to their people. Countries in the region without oil have remained poor. As the people in the oil-rich nations interact more with people from other countries, their cultures are exposed to new and different ideas. Conflicts sometimes develop between people who prefer the traditional ways of life and those who support new ways of life.

Other natural resources in this region are coal, iron ore, and **phosphates**, or mineral salts used to make fertilizer. Forests are scarce, except in Lebanon, which has a lumber industry. Fish are a plentiful resource in parts of the region.

Environmental Concerns—The Seas

The misuse of water in North Africa, Southwest Asia, and Central Asia has damaged both the water and the land. Because water is scarce in the region, any misuse will cause problems.

The Caspian Sea has been harmed by overfishing. Illegal fishing, called **poaching**, has decreased the number of sturgeon.

In the 1960s, irrigation projects drained the two rivers that feed the Aral Sea, causing it to start drying up. The water became

Natural Resources *(continued)*

Identifying

Write a sentence identifying three threats to the water supply in the region.

saltier and unfit for drinking. Fish populations also were harmed. Steps are being taken to save the Aral Sea. Dams and dikes have been built to help raise the water level. A higher water level lowers the salt level.

Other Environmental Issues

Another misuse of water occurs when irrigation water evaporates and leaves salt deposits on the land. The salt makes the land less fertile. In severe cases, the land no longer can be used for farming.

Dams built to control flooding have had positive and negative effects. The Aswān High Dam controls the Nile River's floodwaters. This helps Egyptian farmers and also provides hydroelectric power for Egypt's cities and factories. The dam blocks the flow of silt, however, so now the farmers have to use fertilizers to enrich the soil.

Air pollution is a growing problem. Older cars in the region release polluting fumes. Refineries also release chemicals that pollute the air. **Refineries** are facilities that process petroleum to make gasoline and other products.

Section Wrap-Up

Answer these questions to check your understanding of the entire section.

- 1. Describing** Describe one positive effect and one negative effect of North Africa, Southwest Asia, and Central Asia being an oil-rich region.

- 2. Determining Cause and Effect** How has the drying up of the Aral Sea affected human and animal populations? What steps are being taken to correct the problems?

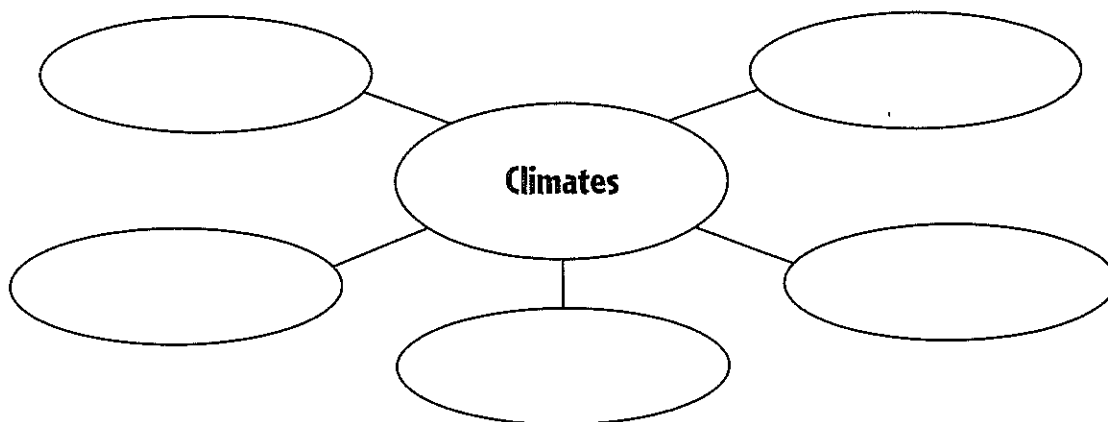
Expository Writing

On a separate sheet of paper, write a paragraph describing the significance of seas and inland waterways to this region.

Climate Regions

Big Idea

Places reflect the relationship between humans and the physical environment. As you read, complete the web diagram below by identifying five climates in the region.



Notes

Read to Learn

A Dry Region (pages 448–449)

Listing

As you read, list the four deserts mentioned.

Much of the land in North Africa, Southwest Asia, and Central Asia is desert, with a hot, dry climate. The main cause of this climate is the dry continental air masses that blow over much of the region.

The Sahara

The Sahara is the world's largest desert, and it covers most of North Africa. The Sahara gets only about 3 inches of rain per year. Most of this rain falls in the winter months. Sometimes violent summer thunderstorms cause flooding. **Wadis**, or dry riverbeds, fill with water when it rains.

Most of the Sahara is rock or gravel. About 20 percent of the Sahara is covered by **ergs**, or large sand dunes. Oases also appear in the Sahara. **Oases** are places where the land is fertile as a result of water from a spring or a well. Villages, towns, and cities are built around oases.

Desert and Steppe Areas

Other deserts appear throughout this region. The Rub' al Khali, or Empty Quarter, is a vast desert in the southern part of the Arabian Peninsula. It averages about 4 inches of rain per year.

A Dry Region *(continued)*

Contrasting

What is the difference between the two major lifestyles of people who live in steppe areas?

Two large deserts in Central Asia are the Kara-Kum and Kyzyl Kum. The deserts in Central Asia are in the middle latitudes. This location causes these deserts to have hot summers but very cold winters.

Dry, treeless, grassy plains called **steppes** border the deserts. Steppes lie north of the Sahara and also can be found in Turkey and to the east in portions of Central Asia. Steppes receive 4 to 16 inches of rain per year.

Some people who live in the steppes are **nomads** who move constantly to find food and water for their herds of animals. Other people are settled and dry farm. **Dry farming** is a method in which land is left unplanted every few years in order to store moisture.

Other Climate Areas

The Mediterranean climate can be found in the coastal areas of North Africa, the eastern Mediterranean, and Turkey. Summers in these areas are hot, but they receive enough rainfall to make the land good for agriculture. As a result, more people live in these areas than in other parts of the region.

A humid subtropical climate covers a small part of Central Asia. Here the summers are hot, the winters are mild, and plenty of rain falls.

The mountainous areas of the region have highland climates. People who live in the highlands tend to herd animals, because the land is difficult to farm.

The Need for Water *(page 450)*

Summarizing

Summarize three ways that countries try to prevent or deal with their water shortages.

Access to water is a problem in North Africa, Southwest Asia, and Central Asia. The region receives little rainfall, and the high temperatures evaporate surface water quickly. A large amount of water is needed to irrigate farmland. Some countries have turned to aquifers as a water source. **Aquifers** are underground rock layers through which water flows.

Countries often have to compete for water, and this can lead to conflicts. For example, Turkey has built dams on the Tigris and Euphrates Rivers. These dams reroute water to Turkey that otherwise would have flowed to Syria and Iraq.

Some countries ration water as a way to manage the shortage. **Rationing** is a method of making a resource available to people in limited amounts. Other countries remove salt and minerals from seawater through a process called **desalinization**. Wealthy countries have built desalinization plants to provide drinkable

The Need for Water *(continued)*

water for their people and usable water for irrigation. Desalination is expensive, however, and poor countries cannot afford to do it. They will continue to face water shortages.

Section Wrap-Up

Answer these questions to check your understanding of the entire section.

- 1. Defining and Explaining** What are oases? Why would people tend to live around them?

- 2. Drawing Conclusions** How can the shortage of water lead to conflict between countries?

Descriptive Writing

In the space provided, write a paragraph describing what you think a nomadic life might be like.
